

**BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA**

<b>In the Matter of:</b>	)	
	)	
<b>Application of Duke Energy Carolinas, LLC</b>	)	<b>Docket No. 2018-319-E</b>
<b>for Adjustments in Electric Rate Schedules</b>	)	
<b><u>and Tariffs</u></b>	)	

**SURREBUTTAL TESTIMONY OF**

**JONATHAN WALLACH**

**ON BEHALF OF**

**SOUTH CAROLINA STATE CONFERENCE OF THE NATIONAL ASSOCIATION FOR  
THE ADVANCEMENT OF COLORED PEOPLE, SOUTH CAROLINA COASTAL  
CONSERVATION LEAGUE, AND UPSTATE FOREVER**

**Resource Insight, Inc.**

**MARCH 19, 2019**

1   **I.   Introduction**

2   **Q:   Please state your name, occupation, and business address.**

3   A:   My name is Jonathan F. Wallach. I am Vice President of Resource Insight,  
4       Inc., 5 Water Street, Arlington, Massachusetts.

5   **Q:   Are you the same Jonathan F. Wallach who filed direct testimony with**  
6       **the Public Service Commission of South Carolina (the “Commission”) in**  
7       **this proceeding?**

8   A:   Yes.

9   **Q:   On whose behalf are you testifying?**

10   A:   I am testifying on behalf of the South Carolina State Conference of the  
11       National Association for the Advancement of Colored People (“SC  
12       NAACP”), the South Carolina Coastal Conservation League (“CCL”), and  
13       Upstate Forever.

14   **Q:   What is the purpose of your surrebuttal testimony?**

15   A:   My surrebuttal testimony responds to the rebuttal testimony of Duke Energy  
16       Carolinas (“DEC” or “the Company”) witnesses Kodwo Ghartey-Tagoe,  
17       Janice Hager, and Michael J. Pirro regarding the Company’s proposal to  
18       increase the residential Basic Facilities Charge (“BFC”) and regarding the  
19       Company’s cost of service study (“COSS”), which served as the basis for its  
20       proposal to increase the residential BFC.<sup>1</sup>

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<sup>1</sup> As explained in a letter from DEC attorney Len S. Anthony to Chief Clerk and Administrator of the Commission Jocelyn Boyd, filed in this docket on March 19, 2019, portions of Ms. Hager’s rebuttal testimony were based on a misunderstanding of my direct testimony. I do not respond to those portions of Ms. Hager’s rebuttal testimony.

1 **Q: Have you revised any of the findings and conclusions in your direct**  
 2 **testimony in light of the Company's rebuttal testimony?**

3 A: No. Consequently, I continue to recommend that the Commission:

- 4 • Reject the Company's use of a minimum-system analysis to classify  
 5 distribution-grid costs as customer-related in the COSS and instead  
 6 require that DEC classify all such distribution-grid costs as demand-  
 7 related.
- 8 • Reject the Company's proposal to increase the residential BFC and  
 9 instead direct DEC to increase the BFC for the residential rate classes  
 10 from current levels by the same percentage as the revenue increase (if  
 11 any) ultimately authorized by the Commission in this proceeding for  
 12 those classes.

13 **II. Response to Company Witness Kodwo Ghartey-Tagoe**

14 **Q: How does Mr. Ghartey-Tagoe respond to your testimony regarding the**  
 15 **residential BFC?**

16 A: Mr. Ghartey-Tagoe repeats the claim in the Company's direct testimony that  
 17 high-usage residential customers would subsidize low-usage customers if the  
 18 residential BFC were not increased as proposed by DEC.<sup>2</sup>

19 **Q: Has the Company substantiated this claim?**

20 A: No.

21 **Q: Does Mr. Ghartey-Tagoe make any new arguments in an attempt to**  
 22 **justify the proposed increase in the residential BFC?**

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<sup>2</sup> *Rebuttal Testimony of Kodwo Ghartey-Tagoe for Duke Energy Carolinas, LLC*, Docket No. 2018-319-E, 15 (March 12, 2019).

1 A: Yes. Mr. Gharthey-Tagoe offers a new rationale for the proposed increase,  
 2 contending that the Company's proposal would reduce spikes in monthly  
 3 bills.<sup>3</sup>

4 **Q: How do you respond to Mr. Gharthey-Tagoe's contention that the**  
 5 **proposed increase in the residential BFC would reduce monthly bill**  
 6 **volatility?**

7 A: The Company is right to be concerned about the financial hardship caused by  
 8 spikes in monthly bills. However, DEC could more effectively address  
 9 monthly bill volatility by encouraging customers experiencing repeated  
 10 payment difficulties to sign up for budget billing under the Company's  
 11 Average Payment Plan and by expanding energy efficiency programs targeted  
 12 to low-income customers.

13 In any event, customers experiencing financial hardship from  
 14 periodically high bills—who tend to be lower-income consumers—would not  
 15 likely find reprieve from the Company's proposal to recover the requested  
 16 revenue increase through higher, but less volatile monthly bills. In other  
 17 words, consistently higher monthly bills are not made more palatable to  
 18 vulnerable households simply because those bills are more uniform in their  
 19 costliness.

### 20 **III. Response to Company Witness Janice Hager**

21 **Q: Please summarize Ms. Hager's response to your direct testimony.**

22 A: In her rebuttal testimony, Ms. Hager responds to my criticisms of the  
 23 minimum-system classification method by explaining the Company's

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<sup>3</sup> *Id.*, 15-16.

1 rationale for adopting the minimum-system method for classifying  
2 distribution-grid costs in its COSS.<sup>4</sup>

3 **Q: How does Ms. Hager describe the Company's rationale for adopting the**  
4 **minimum-system method?**

5 A: Ms. Hager explains that DEC is proposing to adopt the minimum-system  
6 method in order to: (1) be consistent with the Company's use of the  
7 minimum-system method in North Carolina; (2) address concerns regarding  
8 cost-subsidization within the residential class; and (3) improve price signals.<sup>5</sup>

9 **Q: Is consistency between North Carolina and South Carolina a reasonable**  
10 **basis for adopting the minimum-system classification method?**

11 A: No. The Company's practices in another state do not demonstrate that the  
12 Company's proposal in this proceeding is reasonable. On the contrary, the  
13 record in this proceeding shows that the Company's proposal is unreasonable  
14 and supports the Commission's long-standing rejection of the minimum-  
15 system method as contrary to cost-causation principles.

16 **Q: What are the Company's concerns regarding cost-subsidization within**  
17 **the residential class?**

18 A: Ms. Hager claims that low-usage customers are not paying their fair share of  
19 distribution-grid costs through the energy rate, based on a presumption that

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<sup>4</sup> Ms. Hager also points out that one of the fundamental flaws in minimum-system classifications in general that I identify in my direct testimony does not apply to the Company's particular application of the minimum-system method. Ms. Hager's rebuttal in this regard is correct, but does not alter my finding that minimum-system methods in general and the Company's method in particular are fundamentally flawed and result in cost classifications that are inconsistent with cost-causation principles.

<sup>5</sup> *Rebuttal Testimony of Janice Hager for Duke Energy Carolinas, LLC*, Docket No. 2018-319-E, 5 (March 12, 2019).

1       there is a “minimum” or “customer-related” portion of such costs which is  
2       not driven by customer load. According to Ms. Hager, DEC “had to install  
3       some ‘minimum’ amount of distribution facilities” in order to satisfy every  
4       customer’s expectation that “the lights will come on when they flip the light  
5       switch.”<sup>6</sup> Thus, by Ms. Hager’s reasoning, every customer is equally  
6       responsible for the costs incurred to install this “minimum” system and  
7       therefore should contribute an equal share toward recovery of those costs  
8       through the residential BFC.

9       **Q: How do you respond to Ms. Hager’s allegations regarding cost-**  
10       **subsidization with the residential class?**

11       A: As I discussed in my direct testimony, the Company’s claims regarding cost-  
12       subsidization within the residential class are misplaced because they are  
13       based on the false premise that there is a “minimum” or “customer-related”  
14       portion of distribution-grid costs which does not vary with load. Contrary to  
15       Ms. Hager’s description, utilities typically build out their distribution grids to  
16       serve total household demand (as well as the demand from commercial and  
17       industrial distribution customers connected to the distribution grid) not some  
18       hypothetical minimum demand from the flipping of a light switch. Thus,  
19       DEC did not incur a “minimum” amount of distribution-grid costs to serve  
20       customers at zero load and then incur additional costs to meet the total load  
21       of those customers. Instead, the Company sized its distribution system, and  
22       incurred the costs to build that system, based on an expectation regarding the  
23       total demand of all customers connected to the grid. In other words, the

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<sup>6</sup> *Id.*, 11.

1 Company's distribution-grid costs were driven by customer load, not by the  
2 number of customers.

3 If distribution-grid costs are driven by customer load, then each  
4 customer should contribute to recovery of all such costs in proportion to their  
5 load. But, with the Company's proposal to recover a fabricated "minimum"  
6 portion of those distribution-grid costs through the residential BFC, each  
7 customer would contribute an equal amount toward recovery of a portion of  
8 distribution-grid costs rather than contributing in proportion to their load.  
9 Consequently, low-usage customers would contribute more, and high-usage  
10 customers less, than their fair share of distribution-grid costs under the  
11 Company's proposal to triple the residential BFC.

12 **Q: How do you respond to the Company's contention that use of the**  
13 **minimum-system method would improve price signals?**

14 A: The opposite is true. Contrary to Ms. Hager's claim in this regard, the  
15 Company's proposal to recover through the residential BFC those  
16 distribution-grid costs erroneously classified as customer-related under the  
17 minimum-system method would dampen price signals and discourage  
18 economically efficient behavior.

19 As I discussed in my direct testimony, the Company's proposal to  
20 recover distribution-grid costs through the residential BFC runs contrary to  
21 established principles for designing cost-based rates since it would  
22 inappropriately shift recovery of costs driven by usage from the volumetric  
23 energy rate to the fixed BFC. Shifting recovery of usage-driven costs from  
24 the energy rate to the residential BFC would artificially suppress the price  
25 signal provided by the energy rate and inappropriately reduce incentives to

1 control bills through conservation or investments in energy efficiency or  
2 distributed renewable generation.

3 **IV. Response to Company Witness Michael J. Pirro**

4 **Q: How does Mr. Pirro respond to your testimony that distribution-grid**  
5 **costs classified as customer-related under the minimum-system**  
6 **approach are not appropriately recovered through the residential BFC?**

7 A: Mr. Pirro has dramatically revamped his testimony regarding the design of  
8 residential rates.

9 In his direct testimony, Mr. Pirro proposed that all distribution-grid  
10 costs classified in the COSS as customer-related under the minimum-system  
11 approach be recovered through the residential BFC and that the remaining  
12 distribution-grid costs classified as demand-related be recovered through  
13 residential energy rates. However, in his rebuttal testimony, Mr. Pirro now  
14 suggests that all demand-related distribution-grid costs should be recovered  
15 through a residential demand charge.

16 **Q: Would it be appropriate to recover demand-related costs through a**  
17 **residential demand charge, as Mr. Pirro proposes?**

18 A: No. Recovery of demand-related costs through a residential demand charge  
19 would dampen price signals for conservation, promote inefficient customer  
20 behavior, and undermine customers' ability to control electricity costs.

21 Demand charges on a monthly bill are typically determined based on the  
22 customer's maximum demand, whenever that maximum occurs during the  
23 month. In order to control monthly demand costs, customers would therefore  
24 need to have detailed information regarding their load profiles for each day  
25 of the month as well as an in-depth understanding of which combination of



1 appliance- or equipment-usage gives rise to monthly maximum demands.  
2 Even with such information and knowledge, it would be difficult for a  
3 residential customer to reduce demand charges, since even a single failure to  
4 control load during the month would result in the same demand charge as if  
5 the customer had not attempted to control load at all.

6 A demand charge would also provide little or no incentive for  
7 residential customers to take actions that reduce distribution-system costs.  
8 Distribution equipment costs typically are driven by the coincident peak load  
9 for all customers sharing the equipment. An individual customer is unlikely  
10 to reach their maximum demand at the same time as when the coincident  
11 peak on the distribution system occurs. Thus, a demand charge would  
12 provide an incentive to a residential customer to control load at the time that  
13 customer reaches their individual maximum demand, which does not  
14 necessarily correspond to the time of peak load on the distribution system. In  
15 fact, a demand charge could provide a perverse incentive that increases  
16 system costs, because some customers might respond to a demand charge by  
17 shifting loads from their own peak to the peak hour on the local distribution  
18 system, thereby increasing their contribution to maximum or critical loads on  
19 the local distribution system and further stressing the system during peak  
20 periods.

21 Finally, shifting recovery of demand-related costs from the energy rate  
22 to a demand charge would send the wrong energy price signal. Shifting  
23 demand-related costs to a demand charge would lower the energy rate and  
24 thereby perversely encourage increased energy consumption, some of which  
25 might occur at times of peak loading on the distribution system – when  
26 energy conservation is most needed. Shifting costs from the energy rate to a

1 demand charge could therefore increase distribution system costs and offset  
2 any (limited) benefits from a residential demand charge.

3 Severin Borenstein aptly summed up the shortcomings (and the  
4 antiquated nature) of demand charges when he wrote: “It is unclear why  
5 demand charges still exist.”<sup>7</sup>

6 **Q: Does Mr. Pirro’s new proposal in his rebuttal testimony to increase the**  
7 **residential BFC from \$8.29 to \$18.15, rather than to \$28.00, address**  
8 **your concerns?**

9 A: No. As with its original proposal, the Company’s new proposal to increase  
10 the residential BFC to \$18.15 would inappropriately shift load-related costs  
11 from the volumetric energy rate to the fixed customer charge, dampen price  
12 signals to consumers for reducing energy usage, disproportionately and  
13 inequitably increase bills for the Company’s smallest residential customers,  
14 and result in subsidization of larger residential customers’ costs by customers  
15 with below-average usage.

16 Accordingly, the Commission should reject the Company’s new  
17 proposal to increase the residential BFC to \$18.15. Instead, I continue to  
18 recommend that the BFC for the residential rate classes be increased from  
19 current levels by the same percentage as the revenue increase (if any)  
20 ultimately authorized by the Commission in this proceeding for those classes.  
21 This outcome would be consistent with enduring cost-causation and rate-  
22 design principles and would protect low-income customers from undue harm.

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<sup>7</sup> Severin Borenstein, “The Economics of Fixed Cost Recovery by Utilities”, in *Recovery of Utility Fixed Costs: Utility, Consumer, Environmental and Economist Perspectives*, Lawrence Berkeley National Laboratory, 60 (2016), <http://eta-publications.lbl.gov/sites/default/files/lbnl-1005742.pdf>.

1    **Q: Does this conclude your surrebuttal testimony?**

2    A: Yes.